



EC4SAW SERIES

5-6 WATT WIDE INPUT DC-DC CONVERTERS

FEATURE

- * 5-6W Isolated Output
- * Compact SIP-8 Package
- * Efficiency to 89%
- * 4:1 Input Range
- * Regulated Outputs
- * Remote On/Off Control
- * 1500VDC Isolation
- * Continuous Short Circuit Protection



MODEL NUMBER	INPUT VOLTAGE	OUTPUT VOLTAGE	OUTPUT CURRENT		INPUT CURRENT		%EFF.		CAPACITOR LOAD MAX.
			MIN.	MAX.	NO LOAD	FULL LOAD	(3)	(2)	
EC4SAW-24S33N	9-36 VDC	3.3 VDC	0 mA	1500 mA	4 mA	310 mA	82	82	4700uF
EC4SAW-24S05N	9-36 VDC	5 VDC	0 mA	1200 mA	4 mA	298 mA	86	86	2200uF
EC4SAW-24S12N	9-36 VDC	12 VDC	0 mA	500 mA	5 mA	288 mA	88	88	1100uF
EC4SAW-24S15N	9-36 VDC	15 VDC	0 mA	400 mA	5 mA	288 mA	89	88	470uF
EC4SAW-48S33N	18-75 VDC	3.3 VDC	0 mA	1500 mA	3 mA	155 mA	82	82	4700uF
EC4SAW-48S05N	18-75 VDC	5 VDC	0 mA	1200 mA	3 mA	150 mA	85	85	2200uF
EC4SAW-48S12N	18-75 VDC	12 VDC	0 mA	500 mA	3 mA	145 mA	88	89	1100uF
EC4SAW-48S15N	18-75 VDC	15 VDC	0 mA	400 mA	3 mA	145 mA	89	88	470uF

NOTE:

1. Nominal Input Voltage 24 or 48 VDC
2. Measured at Nominal Input Voltage
3. Measured at 12VDC for 24Vin, 24VDC for 48Vin

SPECIFICATIONS

All Specifications Typical At Nominal Line, Full Load, and 25°C Unless Otherwise Noted

INPUT SPECIFICATIONS:

Input Voltage Range	24V	9-36V
	48V	18-75V
Input Surge Voltage (100 ms max.)	24V	50VDC max.
	48V	100VDC max.
Input Filter	Capacitive	
Remote on/off control:		
Module On	Open or high impedance	
Module Off	2mA to 4mA	
Module Off (input idle current)	2.5mA max.	

OUTPUT SPECIFICATIONS:

Voltage Accuracy	±1.5% max.
Transient Response: 25% Step Load Change	
Recovery Time	< 250us
Ripple & Noise, 20MHz BW	100mV pk-pk max.
Temperature Coefficient	±0.03%/°C
Short Circuit Protection	Continuous
Line Regulation (note1)	±0.2% max.
Load Regulation (note2)	±0.5% max.
Current Limit	180% typ.
Start up time	15ms typ.

GENERAL SPECIFICATIONS:

Efficiency	See Table
Isolation Voltage	1500VDC min.
Isolation Resistance	10 ⁹ ohm min.
Isolation Capacitance	50pF max.
Switching Frequency	580KHz typ.
Operating Ambient Temperature	-40°C to +85°C
De-rating, Above 61°C	3.3V/5V ... Linearly to Zero power at 105°C
De-rating, Above 65°C	12V/15V ... Linearly to Zero power at 105°C
Case Temperature (note3)	105°C max.
Cooling	Natural Convection
Storage Temperature	-55°C to +125°C
Humidity	95% RH max. Non condensing
MTBF	MIL-STD-217F, GB, 25°C, Full Load T.B.D. hrs
Dimensions	0.86x0.36x0.44 inches(21.8x9.2x11.1 mm)
Case Material	Non-Conductive Black Plastic
Weight	4.8g

NOTE:

1. Measured from high line to low line.
2. Measured from full load to no load.
3. Maximum case temperature under any operating condition should not be exceeded 105°C.

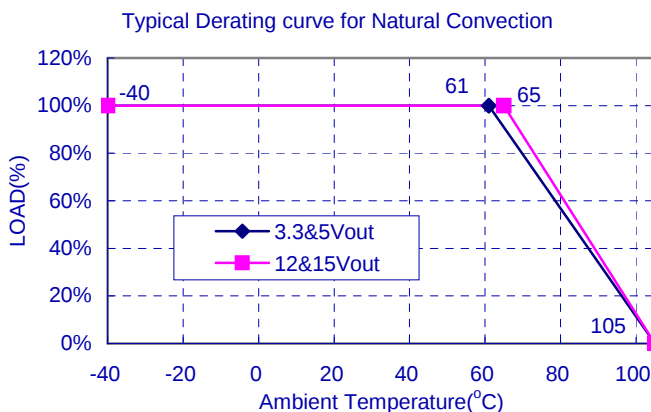
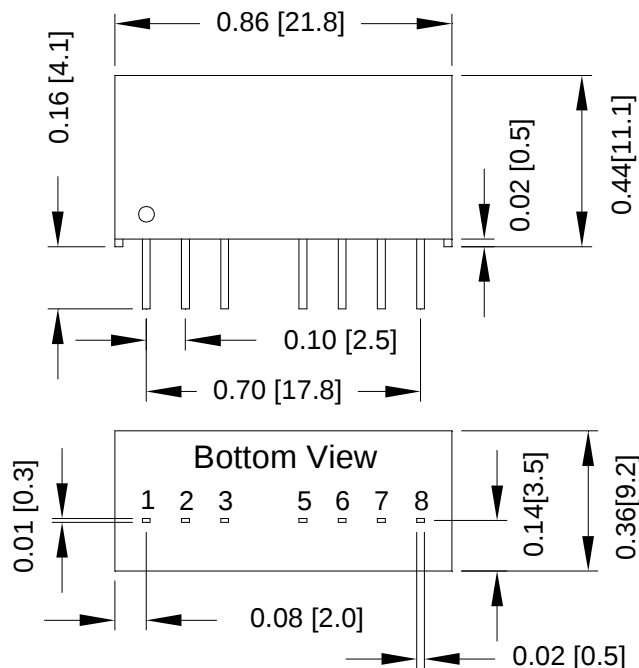
CASE SA DIMENSIONS:

All Dimensions In Inches(mm)

Tolerances : Inches millimeters

X.XX±0.02 X.X±0.5

Pin ±0.002 ±0.05



PIN CONNECTION	
Pin	Single
1	-V Input
2	+V Input
3	On/Off
5	NC
6	+V Output
7	-V Output
8	NC

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